

WHAT IS CLAIMED IS:

- 1     1.    An image display control unit which displays an image  
2       on a display screen, said control unit comprising:  
3           a screen size information obtaining section for obtaining  
4       information on a display size of said display screen;  
5           an image information obtaining section for obtaining  
6       information on vertical and horizontal sizes of said image;  
7           an arithmetic section for calculating an image  
8       magnification ratio so that at least one of said vertical and  
9       horizontal sizes of said image substantially conforms with  
10      at least one of vertical and horizontal display sizes of said  
11      display screen; and  
12           a display control section for displaying said image at  
13      the calculated magnification ratio on said display screen.
- 1     2.    An image display control unit according to claim 1, wherein  
2       said arithmetic section calculates image magnification ratios  
3       for when said vertical size of said image is set to substantially  
4       conform with said vertical display size of said display screen  
5       and for when said horizontal size of said image is set to  
6       substantially conform with said horizontal display size of  
7       said display screen, and selects the larger one of the calculated  
8       vertical and horizontal magnification ratios and outputs the  
9       selected magnification ratio to said display control section.
- 1     3.    An image display control unit which displays an image

2 on a display screen, said control unit comprising:  
3 a character size detecting section for obtaining a size  
4 of a character included in said image;  
5 an arithmetic section for calculating magnification ratio  
6 of said image on the basis of the character size so that said  
7 character in said image is displayed at a predetermined size  
8 on said display screen; and  
9 a display control section for displaying said image at  
10 the calculated magnification ratio on said display screen.

1 4. An image display control unit according to claim 3, wherein  
2 said predetermined size is height of said character.

1 5. An image display control unit according to claim 3, wherein  
2 said predetermined size is the number of pixels for the character  
3 of height.

1 6. An image display control unit according to claim 3, wherein  
2 said predetermined size is a field angle in a character height  
3 direction.

1 7. An image display control unit according to claim 1, further  
2 comprising a first storing section for associating the  
3 calculated magnification ratio with said image and for  
4 retaining the associated magnification ratio.

1 8. An image display control unit according to claim 2, further

2 comprising a first storing section for associating the  
3 calculated magnification ratio with said image and for  
4 retaining the associated magnification ratio.

1 9. An image display control unit according to claim 3, further  
2 comprising a first storing section for associating the  
3 calculated magnification ratio with said image and for  
4 retaining the associated magnification ratio.

1 10. An image display control unit according to claim 4, further  
2 comprising a first storing section for associating the  
3 calculated magnification ratio with said image and for  
4 retaining the associated magnification ratio.

1 11. An image display control unit according to claim 5, further  
2 comprising a first storing section for associating the  
3 calculated magnification ratio with said image and for  
4 retaining the associated magnification ratio.

1 12. An image display control unit according to claim 6, further  
2 comprising a first storing section for associating the  
3 calculated magnification ratio with said image and for  
4 retaining the associated magnification ratio.

1 13. An image display control unit according to claim 1, further  
2 comprising a second storing section for associating display  
3 position information, on location of said image on the display

4 screen, with said image and for retaining the associated display  
5 position information.

1 14. An image display control unit according to claim 2, further  
2 comprising a second storing section for associating display  
3 position information, on location of said image on the display  
4 screen, with said image and for retaining the associated display  
5 position information.

1 15. An image display control unit according to claim 3, further  
2 comprising a second storing section for associating display  
3 position information, on location of said image on the display  
4 screen, with said image and for retaining the associated display  
5 position information.

1 16. An image display control unit according to claim 4, further  
2 comprising a second storing section for associating display  
3 position information, on location of said image on the display  
4 screen, with said image and for retaining the associated display  
5 position information.

1 17. An image display control unit according to claim 5, further  
2 comprising a second storing section for associating display  
3 position information, on location of said image on the display  
4 screen, with said image and for retaining the associated display  
5 position information.

1 18. An image display control unit according to claim 6, further  
2 comprising a second storing section for associating display  
3 position information, on location of said image on the display  
4 screen, with said image and for retaining the associated display  
5 position information.

1 19. An image display control unit according to claim 7, further  
2 comprising a second storing section for associating display  
3 position information, on location of said image on the display  
4 screen, with said image and for retaining the associated display  
5 position information.

1 20. An image display control unit according to claim 8, further  
2 comprising a second storing section for associating display  
3 position information, on location of said image on the display  
4 screen, with said image and for retaining the associated display  
5 position information.

1 21. An image display control unit according to claim 9, further  
2 comprising a second storing section for associating display  
3 position information, on location of said image on the display  
4 screen, with said image and for retaining the associated display  
5 position information.

1 22. An image display control unit according to claim 10,  
2 further comprising a second storing section for associating  
3 display position information, on location of said image on

4 the display screen, with said image and for retaining the  
5 associated display position information.

1 23. An image display control unit according to claim 11,  
2 further comprising a second storing section for associating  
3 display position information, on location of said image on  
4 the display screen, with said image and for retaining the  
5 associated display position information.

1 24. An image display control unit according to claim 12,  
2 further comprising a second storing section for associating  
3 display position information, on location of said image on  
4 the display screen, with said image and for retaining the  
5 associated display position information.

1 25. An image display control unit according to claim 13,  
2 wherein said second storing section associates a display  
3 magnification of said image, which is displayed on said display  
4 screen, with said image and stores the associated magnification  
5 ratio.

1 26. An image display control unit according to claim 14,  
2 wherein said second storing section associates a display  
3 magnification of said image, which is displayed on said display  
4 screen, with said image and stores the associated magnification  
5 ratio.

1 27. An image display control unit according to claim 15,  
2 wherein said second storing section associates a display  
3 magnification of said image, which is displayed on said display  
4 screen, with said image and stores the associated magnification  
5 ratio.

1 28. An image display control unit according to claim 16,  
2 wherein said second storing section associates a display  
3 magnification of said image, which is displayed on said display  
4 screen, with said image and stores the associated magnification  
5 ratio.

1 29. An image display control unit according to claim 17,  
2 wherein said second storing section associates a display  
3 magnification of said image, which is displayed on said display  
4 screen, with said image and stores the associated magnification  
5 ratio.

1 30. An image display control unit according to claim 18,  
2 wherein said second storing section associates a display  
3 magnification of said image, which is displayed on said display  
4 screen, with said image and stores the associated magnification  
5 ratio.

1 31. An image display control unit according to claim 19,  
2 wherein said second storing section associates a display  
3 magnification of said image, which is displayed on said display

4 screen, with said image and stores the associated magnification  
5 ratio.

1 32. An image display control unit according to claim 20,  
2 wherein said second storing section associates a display  
3 magnification of said image, which is displayed on said display  
4 screen, with said image and stores the associated magnification  
5 ratio.

1 33. An image display control unit according to claim 21,  
2 wherein said second storing section associates a display  
3 magnification of said image, which is displayed on said display  
4 screen, with said image and stores the associated magnification  
5 ratio.

1 34. An image display control unit according to claim 22,  
2 wherein said second storing section associates a display  
3 magnification of said image, which is displayed on said display  
4 screen, with said image and stores the associated magnification  
5 ratio.

1 35. An image display control unit according to claim 23,  
2 wherein said second storing section associates a display  
3 magnification of said image, which is displayed on said display  
4 screen, with said image and stores the associated magnification  
5 ratio.



1 36. An image display control unit according to claim 24,  
2 wherein said second storing section associates a display  
3 magnification of said image, which is displayed on said display  
4 screen, with said image and stores the associated magnification  
5 ratio.

1 37. An image display control unit according to claim 1, further  
2 comprising a scroll processing section for scrolling said image  
3 on said display screen.

1 38. An image display control unit according to claim 3, further  
2 comprising a scroll processing section for scrolling said image  
3 on said display screen.

1 39. An image display control unit according to claim 1, wherein  
2 an index image, which is produced by reducing an original image,  
3 is displayed as said image on said display screen as said image.

1 40. An image display control unit according to claim 3, wherein  
2 an index image, which is produced by reducing an original image,  
3 is displayed as said image on said display screen as said image.

1 41. An image display control unit according to claim 39,  
2 further comprising a third storing section for associating  
3 position information, on location of an image to be displayed,  
4 with the original image and retaining the associated position  
5 information.

1 42. An image display control unit according to claim 40,  
2 further comprising a third storing section for associating  
3 position information, on location of an image to be displayed,  
4 with the original image and retaining the associated position  
5 information.

1 43. An image display control method of displaying an image  
2 on a display screen for an image displaying apparatus, said  
3 control method comprising:  
4 a screen size information obtaining step of obtaining  
5 information on a display size of said display screen;  
6 an image information obtaining step of obtaining  
7 information on vertical and horizontal sizes of said image;  
8 an arithmetic step of calculating an image magnification  
9 ratio so that at least one of said vertical and horizontal  
10 sizes of said image substantially conforms with at least one  
11 of vertical and horizontal display sizes of said display screen;  
12 and  
13 a display control step of displaying said image at the  
14 calculated magnification ratio on said display screen.

1 44. An image display control method according to claim 43,  
2 wherein, in said arithmetic step, said image magnification  
3 ratio is calculated for when said vertical size of said image  
4 is set to substantially conform with said vertical display  
5 size of said display screen and for when said horizontal size

6 of said image is set to substantially conform with said  
7 horizontal display size of said display screen, and the larger  
8 magnification ratio is selected from the calculated vertical  
9 and horizontal magnification ratios.

1 45. An image display control method of displaying an image  
2 on a display screen, said control method comprising:  
3 a character size detecting step of obtaining a size of  
4 a character included in said image;  
5 an arithmetic step of calculating magnification ratio  
6 of said image on the basis of the detected character size so  
7 that said character in said image is displayed at a predetermined  
8 size on said display screen; and  
9 a display control step of displaying said image at the  
10 calculated magnification ratio on said display screen.

1 46. An image displaying apparatus comprising:  
2 a display screen for displaying an image;  
3 a screen size information obtaining section for obtaining  
4 information on a display size of said display screen;  
5 an image information obtaining section for obtaining  
6 information on vertical and horizontal sizes of said image;  
7 an arithmetic section for calculating an image  
8 magnification ratio so that at least one of said vertical and  
9 horizontal sizes of said image substantially conforms with  
10 at least one of vertical and horizontal display sizes of said  
11 display screen; and

12           a display control section for displaying said image at  
13   the calculated magnification ratio on the display screen.

1   47.   An image displaying apparatus according to claim 46,  
2   wherein said arithmetic section calculates said image  
3   magnification ratio for when said vertical size of said image  
4   is set to substantially conform with said vertical display  
5   size of said display screen and for when said horizontal size  
6   of said image is set to substantially conform with said  
7   horizontal display size of said display screen, and selects  
8   the larger one of the calculated vertical and horizontal  
9   magnification ratios and outputs the selected magnification  
10  ratio to said display control section.

1   48.   An image displaying apparatus comprising:  
2           a display screen for displaying an image;  
3           a character size detecting section for obtaining a size  
4   of a character included in said image;  
5           an arithmetic section for calculating an image  
6   magnification ratio of said image on the basis of the detected  
7   character size so that said character is displayed at a  
8   predetermined size on said display screen; and  
9           a display control section for displaying said image at  
10  the calculated magnification ratio on said display screen.

1   49.   An image display control program recorded  
2   computer-readable recording medium which retains an image

3 display control program for making a computer implement an  
4 image display control function to display an image on a display  
5 screen of an image displaying apparatus,  
6 said image display control program making the computer  
7 function as:  
8 a screen size information obtaining section for obtaining  
9 information on a display size of said display screen;  
10 an image information obtaining section for obtaining  
11 information on vertical and horizontal sizes of said image;  
12 an arithmetic section for calculating an image  
13 magnification ratio so that at least one of said vertical and  
14 horizontal sizes of said image substantially conforms with  
15 at least one of vertical and horizontal display sizes of said  
16 display screen; and  
17 a display control section for displaying said image at  
18 the calculated magnification ratio on said display screen.

1 50. An image display control program recorded  
2 computer-readable recording medium according to claim 49,  
3 wherein said arithmetic section calculates said image  
4 magnification ratio for when said vertical size of said image  
5 is set to substantially conform generally with said vertical  
6 display size of said display screen and for when said horizontal  
7 size of said image is set to substantially conform with said  
8 horizontal display size of said display screen, and to select  
9 the larger one of the calculated vertical and horizontal  
10 magnification ratios for outputting the selected magnification

11 ratio to said display control section.

1 51. An image display control program recorded  
2 computer-readable recording medium which retains an image  
3 display control program for making a computer implement an  
4 image display control function to display an image on a display  
5 screen of an image displaying apparatus,  
6 said recording medium making said computer function as:  
7 a character size detecting section for obtaining a size  
8 of a character included in said image;  
9 an arithmetic section for calculating an image  
10 magnification ratio of said image on the basis of the detected  
11 character size so that said character is displayed at a  
12 predetermined size on said display screen; and  
13 a display control section for displaying said image at  
14 calculated the magnification ratio on said display screen.